

REMARKS

Applicant's remarks are in response to the Official Action mailed November 18, 2004 in which claims 1-11 and 14 are rejected for various reasons. Enclosed herewith is a Petition requesting a one-month extension of time for resetting the deadline for responding to the Official Action from February 18, 2005 to and including March 18, 2005.

As an initial matter, Applicant would like to thank the Examiner for deeming that claims 12 and 13, although objected to as being dependent upon a rejected base claim, would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Applicant has amended claim 5 so as not to include any features not shown in the drawings. Thus, the reference to the electric actuating member "engaging the first side of the first brake pad closer to the bridge section" has been amended to claim "closer to an outside edge of said first mounting portion." Support for this is shown in FIG. 2 of the application. Pursuant to § 2163.06 of the Manual of Patent Examining Procedure, Applicant has amended the detailed description to include what is already shown in the drawings. No new matter has been added by this amendment.

Applicant acknowledges that the Examiner has received papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Applicant also acknowledges that WO 03/014588 A1 has been cited to complete the record. In addition, two documents from the report and European report are made of record by the Examiner in attached Form PTO-892. Also, DE 4210828 and the

U.S. counterpart (U.S. Patent No. 6,325,182) for DE 19913939 are made of record.

In the Official Action, the Examiner has also noted that claim 1, line 12, "the" before "rear" should be changed to a --a--, and in claim 4, line 2 "isarranged" should be changed to --is arranged--. In response to this, the Applicant has amended claim 1 and claim 4 according to the Examiner's request. No new matter has been added by this amendment. Applicant has also amended various other claims for grammatical purposes. None of these amendments should be considered narrowing amendments nor have any of the amendments added new matter to the application.

In the Official Action, the Examiner noted that the abstract should be within the 50-150 word range. In response to this, Applicant has deleted the Abstract as filed and substitutes therefor the attached revised Abstract. No new matter has been added by this amendment.

In the Official Action, the Examiner objected to the drawings under 37 CFR § 1.83(a). The Examiner stated that the drawings must show every feature of the invention specified in the claims. Specifically, the Examiner cited that the features of the "anchor bracket" and the "bridge section" were included within claims 1 and 14 but not shown in the figures. In response to this, Applicant has amended claim 1 and cancelled claim 14. Newly-amended claim 1 no longer includes any features not shown in the claims. No new matter has been added by this amendment.

Additionally, Applicant has amended claim 6 so as not to include any features not shown in the drawings. Thus, the reference to the electric actuating member "engaging the rear of the first brake pad closer to the bridge section" has been amended to claim "closer to an outside edge of said first

mounting portion." Support for this is shown in FIG. 2 of the application. Pursuant to § 2163.06 of the Manual of Patent Examining Procedure, Applicant has amended the detailed description to include what is already shown in the drawings. No new matter has been added by this amendment.

In the Official Action, the Examiner has also noted that claims 1 and 14 appear to be substantially duplicative claims. In response to this, Applicant has cancelled claim 14.

Claims 1-3, 8/2, 8/3, 9/2, 9/3 and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ohta et al., U.S. Patent No. 4,602,702 ("Ohta"). The Examiner essentially contends that Ohta discloses all of the recitations included within the claims for which it is cited against. Applicant respectively traverses the Examiner's rejection and further argues that amended independent claim 1, as originally filed, includes the recitation directed to the positions of actuation on the second side of the first brake pad being at spaced apart positions. Support for this recitation can be found at [0029] of the present application.

In contrast, Ohta discloses a disc braking apparatus in which a pair of actuators is provided. Ohta discloses a piston 107 which may apply a force against a press lever 121 to urge a pad 102 against a disc 101. The Examiner contends that the arrangement is "equivalent to the hydraulic surface brake actuator included within claim 1 of the present invention." In conjunction with piston 107, Ohta also discloses a braking piezoceramic element 220 arranged at one side of the caliper body 14. The piezoceramic element 220 is adapted for applying a thrust on the friction pad also through press lever 121 in order to bring the friction pad 102 into tight contact with the disc 101. The Examiner contends that the piezoceramic element 220 (FIG. 5 of Ohta) is readable on the electric parking brake

actuator. However, as previously alluded to, independent claim 1 includes the recitation wherein the hydraulic service brake actuator and the electric parking brake actuator have positions of actuation on the second side of the first brake pad at positions which are spaced apart. This is directly contrasted with Ohta which discloses the piston 107 and piezoceramic element 220 having a single position of actuation on the pad 102 specifically where press level 121 contacts pad 102 in the embodiment shown in FIG. 3, or where rod 107a contacts pad 102 in the embodiment shown in FIG. 5. Therefore, even though the Examiner states that the indirect action of the piezoceramic element 220 through the press level 121 or rod 107 is equivalent to the actuators of claim 1 being arranged for actuation against a second side of the first brake pad, the Examiner has not considered claim 1 in its entirety. Specifically, amended claim 1 as well as originally filed claim 1, include the recitation directed towards the positions of actuation of the actuators being spaced apart. Applicant, therefore, requests reconsideration of claim 1 in view of Ohta.

In the Official Action, claims 1-3, 8/2, 8/3, 9/2, 9/3 10/9/2, 10/9/3, 11/10/9/3, 11/10/9/2 and 14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Schenk et al. U.S. Patent No. 5,090,518 ("*Schenk*"). The Examiner essentially contends that *Schenk* discloses all of the recitations of the claims, which it is cited against. In response to this rejection, amended claim 1 includes the recitation wherein the hydraulic service brake actuator and the electric parking brake actuator "are operable independently of the other for service brake operation and parking brake operation, respectively." Support for this recitation can be found at [0009] of the present application.

This is contrasted with *Schenk*, which discloses a brake control system having two sets of primary and secondary actuating members. Both actuating member units include a motor 28, 38 and piezoelectric element 36, 46. Although *Schenk* does disclose that the electric motor unit may be replaced by a hydraulic pressure actuator in order to provide a hybrid system, *Schenk* does not disclose that two sets of primary and secondary actuating units are operable independently of each other. Further, as shown in FIGS. 2 and 3 of *Schenk*, the two sets of primary and secondary actuating units are designed to work together in unison. That is, the pair of actuator sets disclosed in *Schenk* act at the same time, but the timing of energizing of each actuating unit and the extent of energizing differs between the respective sets. Moreover, while *Schenk* teaches that the primary actuators can be energized at the same time, the amount of energization is not the same for each primary actuator. The mechanism is to produce the same braking output for each actuator set, but for one set, the output is equal to the output of the primary actuator with no additional load provided by the secondary actuator, whereas the load output of the other set is equal to the addition of the loads provided by the primary and secondary actuators. Thus, the energization of the secondary actuators is carefully timed so that when a secondary actuator of one actuation set is energized, the secondary actuator of another actuation set is de-energized. Thus, the first set and second set of primary and secondary actuating members move in tandem with one another, each responding to a load applied by the other.

Although the present invention can be operated together, such as when the service brake is actuated and it is necessary to also activate the parking brake, the respective brakes are still operable independently of each other. Thus,

for the above reasons, Applicant respectively traverses the Examiner's contention and asserts that claim 1 should be deemed to contain patentable subject matter and be allowed. Additionally, claims 2-3, 8, 9, 10 and 11 depend from claim 1 and, as such, include all of the limitations of the claims from which they depend and, therefore, should also be deemed to contain patentable subject matter and be allowed.

In the Official Action, claims 4-6, 8/4, 8/5, 8/6, 9/4, 9/5, 9/6, 10/9/4, 10/9/5, 10/9/6, 11/10/9/4, 11/10/9/5, and 11/10/9/6, are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schenk*. The Examiner essentially contends that the above-mentioned claims are obvious in view of the disclosure of *Schenk*. However, consistent with arguments made above, amended claim 1 of the present application includes the additional recitation wherein the hydraulic service brake actuator and the electric parking brake actuator are operable independently of the other. As illustrated above, *Schenk* does not teach this recitation. *Schenk* actually teaches away from enabling the two actuating members to be operable independently. Consistent with arguments above, the actuators in *Schenk* work in unison with one another with each of the actuators being dependent on the other. Claims 4-6, 8, 9, 10 and 11 all depend from claim 1 and, therefore, include of the recitations of the claims from which they depend. Applicants respectively traverse the Examiner's contention and assert that claims 4-6, 8, 9, 10 and 11 should also be deemed to contain patentable subject matter and allowed.

In the Official Action, claims 7, 8/7, 9/7, 10/9/7, and 11/10/9/7 are rejected under 35 U.S.C. § 103(a) as being obvious and unpatentable over Warick et al., U.S. Patent No. 3,342,291 ("*Warick*") in view of *Schenk*. The Examiner essentially contends that *Warick* teaches using a pair of

hydraulic brake actuators as included in claim 7 of the present application and that it further would have been obvious to modify the dual hydraulic brake arrangement of FIG. 2 of *Warick* with its intermediate mechanical actuator 24, 40 and replace the mechanical actuator with an electric actuator similar to that of *Schenk* since such modification involves replacing one well known type of brake actuator with an equivalent type of brake actuator. Claims 7, 8, 9, 10 and 11 all depend from amended claim 1 and, thus, also include the recitation that the hydraulic surface brake actuator and the electric parking brake actuator are operable independently of the other. *Warick*, which as already stated, is cited for teaching a dual hydraulic brake arrangement, does not teach two actuators being operably independently of the other. As discussed at column 2, lines 7 et seq. of *Warick*, the dual hydraulic systems are operable in unison and cannot operate independently of the other. Applicants thus respectively traverse the Examiner's contention and assert that claims 7, 8, 9, 10 and 11 contain patentable subject matter and should be allowed.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone Applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: March 9, 2005

Respectfully submitted,

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